



PRACTICE ABSTRACT

Digital technology

July, 2020

INTERACTIVE PLATFORM FOR A SMART DAIRY FARMER

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Relations between dairy producers and processors have been one of the problematic areas in the dairy sector. The major factors causing discontent are the price, the quantity and the quality of the milk. In this context, one of the largest milk processors in Latvia, Food Union, has developed an interactive digital platform for dairy farmers “Smart Dairy Farmer”. The platform is aimed at supporting the farmers supplying the processor with milk and with data of their milk suppliers that could be used to support on-farm decision making, increase traceability of milk and to improve the transparency of the farmers-processors relations.

The platform allows a farmer to monitor several farms’ performance indicators at any selected time-frame. Firstly, it provides a farmer with a way to monitor the sale price for the milk they have supplied and to compare this indicator with global average milk prices. It also provides data regarding the quality of the milk sold (such as protein content, milk fat and other macronutrients). The Food Union refreshes the data used in the platform two to three times a month. Thus, although it is not entirely real-time monitoring, it still provides a clear illustration of the dairy trade dynamics allowing farmers to plan their resources more effectively.

The tool is developed using Microsoft Power BI analytics platform, which is available for free to iOS and Android users. It is available to the suppliers of the processor.

Application scenario

Logging and analysing data on milk to efficiently plan farm resources and operations. Real-time evidence-based decision making

Digital technologies

Data sharing, mobile app, online platform

Socio-economic impact

- Economic: improved efficiency, clearer relationships between links in the dairy production supply chain, market optimisation
- Environmental: improved production forecast avoids excessive resource use and reduces waste
- Social: traceability, transparency, better production management

More info: <https://foodunion.com/news/food-union-creates-digital-tool-for-latvian-farmers>



Purpose of the tool

The platform is developed to improve communication and transparency between farmers and the processor of the dairy industry. The interactive platform also helps farmers to improve the efficiency of their farms and the quality of milk they supply to the processor. In addition, it also helps to improve the traceability of the milk. It does so by sharing data available to the processor with farmers.

At the same time, it also sets a new standard for dairy business management. The platform is available only to the suppliers of the processor, and it is believed that in the long-term it will also help to strengthen loyal and trustful relations between the two actors of the supply chain.

Description of the tool

The tool is based on the Microsoft Power BI analytics platform, which is available for free to iOS and Android users. It combines aggregated data and the farm-level data on milk supplies available to the processor.

The key features of the new platform offer farmers, who have developed long-term cooperation with Food Union, the opportunity to see and analyse, for any particular cooperation period, data such as the quantity of milk sold and the quality of its components, including milk fat and protein content. Farmers can also keep track of financial data with the help of the tool, including data on payment amounts the farmer has received and the total amount of milk sold, as well as his or her average milk price and how it compares with the average market price.

The platform offers the data to a farmer in a visual way, allowing them to monitor their performance. This data is used mainly to support on-farm decision making and to improve the quality of the produced milk.

Areas of socio-economic impacts

Social	Improved traceability, transparency, and better production management. Data sharing improves trust and loyalty between the engaged actors.
Economic	Real-time evidence-based decision making and management that should result in more efficient farming. Clearer relationships between links in the dairy production supply chain and market optimisation.
Environmental	Improved production forecasting means more efficient use of resources, which reduces waste.

